(FILE 'HOME' ENTERED AT 12:04:50 ON 20 DEC 2002)

FILE 'CAPLUS, MEDLINE, BIOSIS' ENTERED AT 12:05:29 ON 20 DEC 2002
L1 22472 FILE CAPLUS
L2 425 FILE MEDLINE
L3 509 FILE BIOSIS
TOTAL FOR ALL FILES
L4 23406 S COUPLING(W)AGENT
L5 0 FILE CAPLUS
L6 0 FILE MEDLINE
L7 0 FILE BIOSIS
TOTAL FOR ALL FILES
L8 0 S L4 AND (ETHYLTHIO? (3W)TETRAZOLE)
L9 0 FILE CAPLUS
L10 0 FILE MEDLINE
L11 0 FILE BIOSIS
TOTAL FOR ALL FILES
L12 0 S L4 AND (ETHYLTHIO?(3W)TETRAZOLE)
L13 10 FILE CAPLUS
L14 2 FILE MEDLINE
L15 3 FILE BIOSIS
TOTAL FOR ALL FILES
L16 15 S (ETHYLTHIO?(3W)TETRAZOLE)

FILE 'REGISTRY' ENTERED AT 12:06:36 ON 20 DEC 2002
L17 5 S (ETHYLTHIO?(3W)TETRAZOLE)
L18 1 S 5(W)ETHYLTHIO(W)1H(W)TETRAZOLE

FILE 'CAPLUS' ENTERED AT 12:08:33 ON 20 DEC 2002
L19 15 S L18
L20 41 S L17
L21 1 S L19 AND L20 AND PHOSPHOROTHIOATE

FILE 'STNGUIDE' ENTERED AT 12:09:11 ON 20 DEC 2002

FILE 'CAPLUS, MEDLINE, BIOSIS, USPATFULL' ENTERED AT 12:16:25 ON 20 DEC 2002
L22 0 FILE CAPLUS
L23 0 FILE MEDLINE
L24 0 FILE BIOSIS
L25 71 FILE USPATFULL
TOTAL FOR ALL FILES
L26 71 S L4 AND ETHYLTHIO AND TETRAZOLE
L27 0 FILE CAPLUS
L28 0 FILE MEDLINE
L29 0 FILE BIOSIS
L30 0 FILE USPATFULL
TOTAL FOR ALL FILES
L31 0 S L26 AND PHOSPHOROTHIOATE
L32 0 FILE CAPLUS
L33 0 FILE MEDLINE
L34 0 FILE BIOSIS
L35 1 FILE USPATFULL
TOTAL FOR ALL FILES
L36 1 S L26 AND THIOPHOSPHATE
L37 0 FILE CAPLUS
L38 0 FILE MEDLINE
L39 0 FILE BIOSIS
L40 0 FILE USPATFULL
TOTAL FOR ALL FILES
L41 0 S L26 AND PHOSPHOROTHIOATE

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     TOTAL FOR ALL FILES
L12           0 S L4 AND (ETHYLTHIO?(3W)TETRAZOLE)
L13          10 FILE CAPLUS
L14           2 FILE MEDLINE
L15           3 FILE BIOSIS
     TOTAL FOR ALL FILES
L16          15 S (ETHYLTHIO?(3W)TETRAZOLE)

     FILE 'REGISTRY' ENTERED AT 12:06:36 ON 20 DEC 2002
L17           5 S (ETHYLTHIO?(3W)TETRAZOLE)
L18           1 S 5(W)ETHYLTHIO(W)1H(W)TETRAZOLE

     FILE 'CAPLUS' ENTERED AT 12:08:33 ON 20 DEC 2002
L19          15 S L18
L20          41 S L17
L21           1 S L19 AND L20 AND PHOSPHOROTHIOATE

     FILE 'STNGUIDE' ENTERED AT 12:09:11 ON 20 DEC 2002

     FILE 'CAPLUS, MEDLINE, BIOSIS, USPATFULL' ENTERED AT 12:16:25 ON 20 DEC
     2002
L22           0 FILE CAPLUS
L23           0 FILE MEDLINE
L24           0 FILE BIOSIS
L25          71 FILE USPATFULL
     TOTAL FOR ALL FILES
L26          71 S L4 AND ETHYLTHIO AND TETRAZOLE
L27           0 FILE CAPLUS
L28           0 FILE MEDLINE
L29           0 FILE BIOSIS
L30           0 FILE USPATFULL
     TOTAL FOR ALL FILES
L31           0 S L26 AND PHOSPHOROTHIOATE
L32           0 FILE CAPLUS
L33           0 FILE MEDLINE
L34           0 FILE BIOSIS
L35           1 FILE USPATFULL
     TOTAL FOR ALL FILES
L36           1 S L26 AND THIOPHOSPHATE
L37           0 FILE CAPLUS
L38           0 FILE MEDLINE
L39           0 FILE BIOSIS
L40           0 FILE USPATFULL
     TOTAL FOR ALL FILES
L41           0 S L26 AND PHOSPHOROTHIOATE
L42           0 FILE CAPLUS
L43           0 FILE MEDLINE
L44           0 FILE BIOSIS
L45          48 FILE USPATFULL
     TOTAL FOR ALL FILES
L46          48 S ETHYLTHIO AND TETRAZOLE AND PHOSPHOROTHIOATE
L47           0 FILE CAPLUS
L48           0 FILE MEDLINE
L49           0 FILE BIOSIS
L50          30 FILE USPATFULL
     TOTAL FOR ALL FILES
L51          30 S L46 AND (CHIRAL OR ENANTIOMER OR STEREOISOMER OR RACEMIC)
L52           0 FILE CAPLUS
L53           0 FILE MEDLINE
L54           0 FILE BIOSIS
L55          11 FILE USPATFULL
     TOTAL FOR ALL FILES
```

L28 ANSWER 1 OF 17 USPATFULL
ACCESSION NUMBER: 2002:280785 USPATFULL
TITLE: Process for preparing peptide derivatized oligomeric compounds
INVENTOR(S): Manoharan, Muthiah, Carlsbad, CA, UNITED STATES
Guzaev, Andrei P., Carlsbad, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002156235	A1	20021024
APPLICATION INFO.:	US 2001-949474	A1	20010907 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2000-658517, filed on 8 Sep 2000, PENDING
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Michael P. Straher, WOODCOCK WASHBURN LLP, 46th Floor, One Liberty Place, Philadelphia, PA, 19103
NUMBER OF CLAIMS: 31
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Page(s)
LINE COUNT: 3069
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods of preparing peptide linked oligomeric compounds are provided. The method is useful for preparing larger scale amounts of peptide linked oligomeric compounds. More particularly, the synthesis of peptide linked oligomeric compounds is performed without the problems of aggregation associated with electrostatic interactions. The present method describes using equimolar amounts of oligomeric compounds and peptide reagents providing for an increase in overall efficiency.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L28 ANSWER 2 OF 17 USPATFULL
ACCESSION NUMBER: 2002:236261 USPATFULL
TITLE: Charge tags and the separation of nucleic acid molecules
INVENTOR(S): Lyamichev, Victor, Madison, WI, UNITED STATES
Skrzpczynski, Zbigniew, Verona, WI, UNITED STATES
Allawi, Hatim T., Madison, WI, UNITED STATES
Wayland, Sarah R., Madison, WI, UNITED STATES
Takova, Tsetska, Madison, WI, UNITED STATES
Neri, Bruce P., Madison, WI, UNITED STATES
PATENT ASSIGNEE(S): Third Wave Technologies, Inc. (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002128465	A1	20020912
APPLICATION INFO.:	US 2001-777430	A1	20010206 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1999-333145, filed on 14 Jun 1999, PENDING Continuation-in-part of Ser. No. US 1996-682853, filed on 12 Jul 1996, GRANTED, Pat. No. US 6001567
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MEDLEN & CARROLL, LLP, 101 HOWARD STREET, SUITE 350, SAN FRANCISCO, CA, 94105
NUMBER OF CLAIMS: 86
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 46 Drawing Page(s)
LINE COUNT: 5163
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel phosphoramidites, including positive and neutrally charged compounds. The present invention also provides charge tags for attachment to materials including solid supports and nucleic acids, wherein the charge tags increase or decrease the net charge of the material. The present invention further provides methods for separating and characterizing molecules based on the charge differentials between modified and unmodified materials.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L28 ANSWER 3 OF 17 USPATFULL
ACCESSION NUMBER: 2000:57750 USPATFULL
TITLE: Chimeric oligonucleoside compounds
INVENTOR(S): Arnold, Jr., Lyle J., Poway, CA, United States
Reynolds, Mark A., San Diego, CA, United States
Giachetti, Cristina, Solano Beach, CA, United States
Lebedev, Alexandre V., San Diego, CA, United States
PATENT ASSIGNEE(S): Genta Incorporated, Lexington, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6060456		20000509
APPLICATION INFO.:	US 1997-960111		19971027 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1995-481637, filed on 7 Jun 1995, now abandoned which is a continuation of Ser. No. US 1994-238177, filed on 4 May 1994, now abandoned which is a continuation of Ser. No. US 1994-233778, filed on 26 Apr 1994, now abandoned which is a continuation of Ser. No. US 1993-154013, filed on 16 Nov 1993, now abandoned which is a continuation of Ser. No. US 1993-154014, filed on 16 Nov 1993, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Riley, Jezia
LEGAL REPRESENTATIVE: Knobbe, Martens, Olson & Bear LLP.
NUMBER OF CLAIMS: 38
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 15 Drawing Figure(s); 12 Drawing Page(s)
LINE COUNT: 5081
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Chimeric oligonucleoside compounds, and methods of preparing and formulating the same, are disclosed. The compounds and compositions are useful in activating RNaseH-mediated cleavage of target ribonucleic acid sequences, and in treating disease conditions relating to such sequences.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L28 ANSWER 4 OF 17 USPATFULL
ACCESSION NUMBER: 2000:21682 USPATFULL
TITLE: Synthetic oligomers having chirally pure phosphonate internucleosidyl linkages mixed with non-phosphonate internucleosidyl linkages
INVENTOR(S): Arnold, Jr., Lyle John, Poway, CA, United States
Hogrefe, Richard Isais, San Diego, CA, United States
Reynolds, Mark Alan, San Diego, CA, United States
Riley, Timothy Andrew, Nipomo, CA, United States
Schwartz, David Aaron, Encinitas, CA, United States
Vaghefi, Morteza Monir, San Diego, CA, United States
Brown, Bob Dale, Encinitas, CA, United States
PATENT ASSIGNEE(S): Genta Incorporated, San Diego, CA, United States (U.S.

corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6028188		20000222
APPLICATION INFO.:	US 1994-342924		19941121 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1993-154014, filed on 16 Nov 1993
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Houtteman, Scott W.
LEGAL REPRESENTATIVE: Knobbe, Martins, Olson & Bear, LLP
NUMBER OF CLAIMS: 23
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT: 3155
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Oligomers having chirally pure phosphonate internucleosidyl linkages mixed with non-phosphonate internucleosidyl linkages which hybridize to RNA target sequences and methods for their preparation are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L28 ANSWER 5 OF 17 USPATFULL
ACCESSION NUMBER: 1999:146782 USPATFULL
TITLE: Synthetic oligomers having phosphonate internucleosidyl linkages of undefined chirality mixed with non-phosphonate internucleosidyl linkages
INVENTOR(S): Dwyer, Brian P., Poway, CA, United States
Arnold, Jr., Lyle John, Poway, CA, United States
Reynolds, Mark Alan, San Diego, CA, United States
PATENT ASSIGNEE(S): Genta, Inc., San Diego, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5986083		19991116
APPLICATION INFO.:	US 1994-340834		19941117 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1994-238177, filed on 4 May 1994, now abandoned And a continuation-in-part of Ser. No. US 1994-233778, filed on 26 Apr 1994, now abandoned And a continuation-in-part of Ser. No. US 1993-154014, filed on 16 Nov 1993, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Houtteman, Scott W.
LEGAL REPRESENTATIVE: Knobbe, Martens, Olson & Bear, LLP.
NUMBER OF CLAIMS: 21
EXEMPLARY CLAIM: 1
LINE COUNT: 2384
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Oligomers having phosphonate internucleosidyl linkages mixed with non-phosphonate internucleosidyl linkages which hybridize to RNA target sequences and methods for their preparation are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L28 ANSWER 6 OF 17 USPATFULL
ACCESSION NUMBER: 1999:4884 USPATFULL
TITLE: Synthons for synthesis of oligonucleotide N3-P5 phosphoramidates
INVENTOR(S): Hirschbein, Bernard L., San Francisco, CA, United

States
Fearon, Karen L., Union City, CA, United States
Gryaznov, Sergei M., San Mateo, CA, United States
McCurdy, Sarah N., San Mateo, CA, United States
Nelson, Jeffrey S., Fremont, CA, United States
Schultz, Ronald G., Fremont, CA, United States
PATENT ASSIGNEE(S): Lynx Therapeutics, Inc., Hayward, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5859233		19990112
APPLICATION INFO.:	US 1996-771789		19961220 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1996-663918, filed on 14 Jun 1996 which is a continuation-in-part of Ser. No. US 1996-603566, filed on 21 Feb 1996, now patented, Pat. No. US 5684143
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Kunz, Gary L.
LEGAL REPRESENTATIVE: Macevicz, Stephen C., Powers, Vincent M.
NUMBER OF CLAIMS: 8
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Figure(s); 5 Drawing Page(s)
LINE COUNT: 2047
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides a method of synthesizing oligonucleotide N3'.fwdarw.P5' phosphoramidates using an amine-exchange reaction of phosphoramidites in which a -deprotected 3'-amino group of a solid phase supported oligonucleotide chain is exhanged for the amino portion of a 5'-phosphoramidite of an incoming monomer which has a protected 3'-amino group. The resulting internucleotide phosphoramidite linkage is then oxidized to form a stable protected phosphoramidate linkage. The method of the invention greatly improves product yields and reduces reagent usage over currently available methods for synthesizing the above class of compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L28 ANSWER 7 OF 17 USPATFULL
ACCESSION NUMBER: 1998:160098 USPATFULL
TITLE: Sulfurization of phosphorus-containing compounds
INVENTOR(S): Barany, George, Falcon Heights, MN, United States
Hammer, Robert P., Baton Rouge, LA, United States
Musier-Forsyth, Karin, Roseville, MN, United States
Xu, Qinghong, Lauderdale, MN, United States
Chen, Lin, Minneapolis, MN, United States
PATENT ASSIGNEE(S): Regents of the University of Minesota, Minneapolis, MN, United States (U.S. corporation)
The Board of Supervisors of LA State University, Baton Rouge, LA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5852168		19981222
APPLICATION INFO.:	US 1996-641920		19960430 (8)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Raymond, Richard L.
LEGAL REPRESENTATIVE: Mueting Raasch Gebhardt
NUMBER OF CLAIMS: 27
EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 13 Drawing Figure(s); 13 Drawing Page(s)
LINE COUNT: 1447
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a method for sulfurizing a phosphorus-containing compound, such as a trivalent phosphorus compound, using a disulfide-containing five-membered heterocycle.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L28 ANSWER 8 OF 17 USPATFULL
ACCESSION NUMBER: 1998:128377 USPATFULL
TITLE: Solid phase synthesis of oligonucleotide N3'-P5' phosphoramidates
INVENTOR(S): Hirschbein, Bernard L., San Francisco, CA, United States
Fearon, Karen L., Union City, CA, United States
Gryaznov, Sergei M., San Mateo, CA, United States
McCurdy, Sarah N., San Mateo, CA, United States
Nelson, Jeffery S., Fremont, CA, United States
Schultz, Ronald G., Fremont, CA, United States
PATENT ASSIGNEE(S): Lynx Therapeutics, Inc., Hayward, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5824793		19981020
APPLICATION INFO.:	US 1996-663918		19960614 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1996-603566, filed on 21 Feb 1996, now patented, Pat. No. US 5684143
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Kunz, Gary L.
LEGAL REPRESENTATIVE: Macevicz, Stephen C., Powers, Vincent M.Dehlinger & Associates
NUMBER OF CLAIMS: 58
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT: 2048
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides a method of synthesizing oligonucleotide N3'.fwdarw.P5' phosphoramidates using an amine-exchange reaction of phosphoramidites in which a deprotected 3'-amino group of a solid phase supported oligonucleotide chain is exhanged for the amino portion of a 5'-phosphoramidite of an incoming monomer which has a protected 3'-amino group. The resulting internucleotide phosphoramidite linkage is then oxidized to form a stable protected phosphoramidate linkage. The method of the invention greatly improves product yields and reduces reagent usage over currently available methods for synthesizing the above class of compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L28 ANSWER 9 OF 17 PCTFULL COPYRIGHT 2002 Univentio
ACCESSION NUMBER: 2002079216 PCTFULL ED 20021022 EW 200241
TITLE (ENGLISH): LABELED OLIGONUCLEOTIDES, METHODS FOR MAKING SAME, AND COMPOUNDS USEFUL THEREFOR
TITLE (FRENCH): OLIGONUCLEOTIDES MARQUES, METHODES DE PRODUCTION DESDITS OLIGONUCLEOTIDES, ET COMPOSES UTILISES AVEC CES OLIGONUCLEOTIDES
INVENTOR(S): MANOHARAN, Muthiah; GUZAEV, Andrei
PATENT ASSIGNEE(S): ISIS PHARMACEUTICALS, INC., for all designates States except US; MANOHARAN, Muthiah, for US only; GUZAEV,

Andrei, for US only
AGENT: INGLESE, Jane, E.
LANGUAGE OF FILING: English
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

	NUMBER	KIND	DATE
	WO 2002079216	A1	20021010

DESIGNATED STATES: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZM ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

APPLICATION INFO.:	WO 2002-US10178	A	20020329
PRIORITY INFO.:	US 2001-09/823,031		20010330

ABEN Selectively functionalized oligonucleotides, methods for making same, and compounds useful therefor are disclosed. The oligonucleotides can be selectively functionalized with a first conjugate group at the 3'-terminal position and optionally functionalized with a second conjugate group at the 5'-terminal position and/or one or more internucleotides. Alternatively, the oligonucleotides can be selectively functionalized with a first conjugate group at the 5'-terminal position and optionally functionalized with a second conjugate group at one or more internucleotides. In yet another embodiment, the oligonucleotides can be functionalized with a first conjugate group at one or more internucleotides and with a second conjugate group at one or more different internucleotides.

ABFR L'invention concerne des oligonucleotides selectivement fonctionnalises, des methodes de production desdits oligonucleotides, et des composes utilises avec ces oligonucleotides. Lesdits oligonucleotides peuvent etre selectivement fonctionnalises a l'aide d'un premier groupe de conjugues au niveau de la position terminale 3', et eventuellement a l'aide d'un second groupe de conjugues au niveau de la position terminale 5' et/ou d'au moins un internucleotide. Dans un autre mode de realisation, les oligonucleotides peuvent etre selectivement fonctionnalises a l'aide d'un premier groupe de conjugues au niveau de la position terminale 5', et eventuellement a l'aide d'un second groupe de conjugues au niveau d'au moins un internucleotide. Dans un dernier mode de realisation, les oligonucleotides peuvent etre fonctionnalises a l'aide d'un premier groupe de conjugues au niveau d'au moins un internucleotide, et a l'aide d'un second groupe de conjugues au niveau d'un ou plusieurs internucleotide(s) different(s).

L28 ANSWER 10 OF 17 PCTFULL COPYRIGHT 2002 Univentio
ACCESSION NUMBER: 2002063030 PCTFULL ED 20020827 EW 200233
TITLE (ENGLISH): CHARGE TAGS AND SEPARATION OF NUCLEIC ACID MOLECULES
TITLE (FRENCH): MARQUEURS DE CHARGE ET SEPARATION DE MOLECULES D'ACIDES NUCLEIQUES
INVENTOR(S): LYAMICHEV, Victor; SKRZPCZYNSKI, Zbigniew; ALLAWI, Hatim, T.; WAYLAND, Sarah, R.; TAKOVA, Tsetska; NERI,

Bruce, P.
PATENT ASSIGNEE(S): THIRD WAVE TECHNOLOGIES, INC., for all designates States except US; LYAMICHEV, Victor, for US only; SKRZPCZYNSKI, Zbigniew, for US only; ALLAWI, Hatim, T., for US only; WAYLAND, Sarah, R., for US only; TAKOVA, Tsetska, for US only; NERI, Bruce, P., for US only
AGENT: CARROLL, Peter, G.
LANGUAGE OF FILING: English
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2002063030	A2	20020815

DESIGNATED STATES AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2002-US3423 A 20020206
PRIORITY INFO.: US 2001-09/777,430 20010206

ABEN The present invention relates to novel phosphoramidites, including positive and neutrally charged compounds. The present invention also provides charge tags for attachment to materials including solid supports and nucleic acids, wherein the charge tags increase or decrease the net charge of the material. The present invention further provides methods for separating and characterizing molecules based on the charge differentials between modified and unmodified materials.

ABFR L'invention porte sur de nouvelles phosphoramidites, comprenant des composants a charge positive ou neutre, des marqueurs de charge a fixer a des materiaux dont des supports solides, et des acides nucleiques, lesdits marqueurs augmentant ou reduisant la charge nette des materiaux. L'invention porte egalement sur des procedes de separation et de caracterisation de molecules se basant sur les differentiels de charge entre les materiaux modifies et non modifies.

L28 ANSWER 11 OF 17 PCTFULL COPYRIGHT 2002 Univentio
ACCESSION NUMBER: 2002020544 PCTFULL ED 20020705 EW 200211
TITLE (ENGLISH): PROCESS FOR PREPARING PEPTIDE DERIVATIZED OLIGOMERIC COMPOUNDS
TITLE (FRENCH): PROCEDE POUR L'ELABORATION DE COMPOSES OLIGOMERES EN DERIVATION DE PEPTIDES
INVENTOR(S): MANOHARAN, Muthiah; GUZAEV, Andrei, P.
PATENT ASSIGNEE(S): ISIS PHARMACEUTICALS, INC., for all designates States except US; MANOHARAN, Muthiah, for US only; GUZAEV, Andrei, P., for US only
AGENT: LUCCI, Joseph
LANGUAGE OF FILING: English
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2002020544	A1	20020314

DESIGNATED STATES AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK

SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS
MW MZ SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT
BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2001-US28083 A 20010907
PRIORITY INFO.: US 2000-09/658,517 20000908

ABEN Methods of preparing peptide linked oligomeric compounds are provided. The method is useful for preparing larger scale amounts of peptide linked oligomeric compounds. More particularly, the synthesis of peptide linked oligomeric compounds is performed without the problems of aggregation associated with electrostatic interactions. The present method describes using equimolar amounts of oligomeric compounds and peptide reagents providing for an increase in overall efficiency.

ABFR La presente invention concerne des procedes permettant l'elaboration de composes oligomeres a liaisons peptides. Ce procede convient particulierement pour l'elaboration a grande echelle de composes oligomeres a liaisons peptides. L'invention concerne plus particulierement la synthese de composes oligomeres a liaisons peptides en s'affranchissant des difficultes creees par l'agregation associee aux interactions electrostatiques. Le procede de l'invention porte plus particulierement sur l'utilisation de quantites equimolaires de composes oligomeres et de reactifs peptides permettant une augmentation du rendement global.

L28 ANSWER 12 OF 17 PCTFULL COPYRIGHT 2002 Univentio
ACCESSION NUMBER: 2002014340 PCTFULL ED 20020711 EW 200208
TITLE (ENGLISH): PROCESSES FOR THE PREPARATION OF OLIGONUCLEOTIDES
TITLE (FRENCH): PROCEDE DE PREPARATION D'OLIGONUCLEOTIDES
INVENTOR(S): SANGHVI, Yogesh, S.; SONG, Quanlai
PATENT ASSIGNEE(S): ISIS PHARMACEUTICALS, INC., for all designates States except US; SANGHVI, Yogesh, S., for US only; SONG, Quanlai, for US only
AGENT: CALDWELL, John, W.
LANGUAGE OF FILING: English
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2002014340	A1	20020221

DESIGNATED STATES AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2001-US25623 A 20010816
PRIORITY INFO.: US 2000-09/640,279 20000816

ABEN The present invention discloses methods for synthesizing oligomeric compounds. The methods include a modified phosphoramidite protocol wherein the oxidation and capping steps are combined into a single step. The methods result in increased efficiency and are especially amenable to the large scale synthesis of oligomeric compounds.

ABFR L'invention concerne des procedes de synthese de composants oligomeriques. Les procedes decrits comprennent un protocole de phosphoramidite modifie dans lequel l'oxydation et les phases de coiffage sont combinees en une seule operation. Ces procedes permettent d'obtenir une plus grande efficacite et peuvent etre appliques, en particulier, a une synthese de composants oligomeriques a grande

echelle.

L28 ANSWER 13 OF 17 PCTFULL COPYRIGHT 2002 Univentio
ACCESSION NUMBER: 1997041130 PCTFULL ED 20020514
TITLE (ENGLISH): SULFURIZATION OF PHOSPHORUS-CONTAINING COMPOUNDS
TITLE (FRENCH): SULFURATION DE COMPOSES RENFERMANT DE PHOSPHORE
INVENTOR(S): BARANY, George; MUSIER-FORSYTH, Karin; XU, Qinghong; CHEN, Lin; HAMMER, Robert, P.
PATENT ASSIGNEE(S): REGENTS OF THE UNIVERSITY OF MINNESOTA; LOUISIANA STATE UNIVERSITY AND AGRICULTURAL AND MECHANICAL COLLEGE, THE BOARD OF SUPERVISORS
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

	NUMBER	KIND	DATE
	WO 9741130	A2	19971106
DESIGNATED STATES	JP AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE		
APPLICATION INFO.:	WO 1997-US7118	A	19970429
PRIORITY INFO.:	US 1996-8/641,920		19960430

ABEN The present invention provides a method for sulfurizing a phosphorus-containing compound, such as a trivalent phosphorus compound, using a disulfide-containing five-membered heterocycle.
ABFR La presente invention se rapporte a un procede de sulfuration d'un compose renfermant du phosphore tel qu'un compose phosphoreux trivalent au moyen d'un heterocycle a cinq elements contenant du disulphure.

L28 ANSWER 14 OF 17 PCTFULL COPYRIGHT 2002 Univentio
ACCESSION NUMBER: 1997031009 PCTFULL ED 20020514
TITLE (ENGLISH): SOLID PHASE SYNTHESIS OF OLIGONUCLEOTIDE N3'}P5' PHOSPHORAMIDATES
TITLE (FRENCH): SYNTHESE EN PHASE SOLIDE DE PHOSPHORAMIDATES N3'}P5' OLIGONUCLEOTIDIQUES
INVENTOR(S): HIRSCHBEIN, Bernard, L.; FEARON, Karen, L.; GRYAZNOV, Sergei, M.; McCURDY, Sarah, N.; NELSON, Jeffrey, S.; SCHULTZ, Ronald, G.
PATENT ASSIGNEE(S): LYNX THERAPEUTICS, INC.
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

	NUMBER	KIND	DATE
	WO 9731009	A1	19970828
DESIGNATED STATES	AU CA CN CZ EE FI HU JP KR LT LV NO NZ PL RU SG AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE		
APPLICATION INFO.:	WO 1996-US10418	A	19960614
PRIORITY INFO.:	US 1996-8/603,506		19960221

ABEN The invention provides a method of synthesizing oligonucleotide N3'}P5' phosphoramidates using an amine-exchange reaction of phosphoramidites in which a deprotected 3'-amino group of a solid phase supported oligonucleotide chain is exchanged for the amino portion of a 5'-phosphoramidite of an incoming monomer which has a protected 3'-amino group. The resulting internucleotide phosphoramidite linkage is then oxidized to form a stable protected phosphoramidate linkage. The method of the invention greatly improves product yields and reduces reagent usage over currently

available methods for synthesizing the above class of compound.

ABFR L'invention concerne un procede de synthese de phosphoramidates N3'}P5' oligonucleotidiques par une reaction a echange d'amines de phosphoramidites au cours de laquelle un groupe 3'-amino deprotege d'une chaine oligonucleotidique supportee en phase solide est echange contre la portion amino d'un 5'-phosphoramidite d'un monomere entrant qui possede un groupe 3'-amino protege. La liaison phosphoramidite internucleotidique resultante est ensuite oxydee pour former une liaison phosphoramidate stable et protegee. Le procede de l'invention permet d'ameliorer considerablement les rendements de production et reduit l'utilisation de reactifs en comparaison aux procedes actuels pour effectuer la synthese de la classe de compose indiquee ci-dessus.

L28 ANSWER 15 OF 17 PCTFULL COPYRIGHT 2002 Univentio

ACCESSION NUMBER: 1995014030 PCTFULL ED 20020514

TITLE (ENGLISH): SYNTHETIC OLIGOMERS HAVING CHIRALLY PURE PHOSPHONATE INTERNUCLEOSIDYL LINKAGES MIXED WITH NON-PHOSPHONATE INTERNUCLEOSIDYL LINKAGES

TITLE (FRENCH): OLIGOMERES SYNTHETIQUES AYANT DES LIAISONS INTERNUCLEOSIDYLE PHOSPHONATE CHIRALEMENT PURES MELANGEES AVEC DES LIAISONS INTERNUCLEOSIDYLE NON PHOSPHONATE

INVENTOR(S): ARNOLD, Lyle, John, Jr.; HOGREFE, Richard, Isais; REYNOLDS, Mark, Alan; RILEY, Timothy, Andrew; SCHWARTZ, David, Aaron; VAGHEFI, Morteza, Monir; BROWN, Bob, Dale

PATENT ASSIGNEE(S): GENTA INCORPORATED

LANGUAGE OF PUBL.: English

DOCUMENT TYPE: Patent

PATENT INFORMATION:

NUMBER	KIND	DATE
WO 9514030	A1	19950526

DESIGNATED STATES: AU CA JP KR NZ AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

APPLICATION INFO.: WO 1994-US13341 A 19941116

PRIORITY INFO.: US 1993-8/154,014 19931116

ABEN Oligomers having chirally pure phosphonate internucleosidyl linkages mixed with non-phosphonate internucleosidyl linkages which hybridize to RNA target sequences and methods for their preparation are provided.

ABFR Oligomeres ayant des liaisons internucleosidyle phosphonate chiralement pures melangees avec des liaisons internucleosidyle non phosphonate qui s'hybrident a des sequences cibles d'ARN et procedes de preparation desdits oligomeres.

L28 ANSWER 16 OF 17 PCTFULL COPYRIGHT 2002 Univentio

ACCESSION NUMBER: 1995013834 PCTFULL ED 20020514

TITLE (ENGLISH): CHIMERIC OLIGONUCLEOSIDE COMPOUNDS

TITLE (FRENCH): COMPOSES OLIGONUCLEOSIDIQUES CHIMERIQUES

INVENTOR(S): ARNOLD, Lyle, J., Jr.; REYNOLDS, Mark, A.; GIACHETTI, Christina

PATENT ASSIGNEE(S): GENTA, INCORPORATED; ARNOLD, Lyle, J., Jr.; REYNOLDS, Mark, A.; GIACHETTI, Christina

LANGUAGE OF PUBL.: English

DOCUMENT TYPE: Patent

PATENT INFORMATION:

	NUMBER	KIND	DATE
	WO 9513834	A1	19950526
DESIGNATED STATES	AU CA JP KR NZ US AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE		
APPLICATION INFO.:	WO 1994-US13387	A	19941116
PRIORITY INFO.:	US 1993-8/154,013		19931116
	US 1993-8/154,014		19931116
	US 1994-8/233,778		19940426
	US 1994-8/238,177		19940504

ABEN Chimeric oligonucleoside compounds and methods of preparing and formulating the same are disclosed. The compounds and compositions are useful in activating RNaseH-mediated cleavage of target ribonucleic acid sequences and in treating disease conditions relating to such sequences.

ABFR Composes oligonucleosidiques chimeriques et leurs procedes de preparation et de formulation. Ces composes et compositions sont utilisables dans l'activation du clivage a mediation par RNaseH des sequences cibles d'acide ribonucleique, et dans le traitement des etats pathologiques associes a ces sequences.

L28 ANSWER 17 OF 17 PCTFULL COPYRIGHT 2002 Univentio

ACCESSION NUMBER: 1995013833 PCTFULL ED 20020514

TITLE (ENGLISH): SYNTHETIC OLIGOMERS HAVING PHOSPHONATE INTERNUCLEOSIDYL LINKAGES OF UNDEFINED CHIRALITY MIXED WITH NON-PHOSPHONATE INTERNUCLEOSIDYL LINKAGES

TITLE (FRENCH): OLIGOMERES SYNTHETIQUES COMPRENANT DES LIAISONS PHOSPHONATE INTERNUCLEOSIDYLE DE CHIRALITE INDEFINIE MELANGEES AVEC DES LIAISONS NON PHOSPHONATE INTERNUCLEOSIDYLE

INVENTOR(S): DWYER, Brian, Patrick; ARNOLD, Lyle, John, Jr.; REYNOLDS, Mark, Alan

PATENT ASSIGNEE(S): GENTA INCORPORATED

LANGUAGE OF PUBL.: English

DOCUMENT TYPE: Patent

PATENT INFORMATION:

	NUMBER	KIND	DATE
	WO 9513833	A1	19950526
DESIGNATED STATES	AU CA JP KR NZ AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE		
APPLICATION INFO.:	WO 1994-US13386	A	19941116
PRIORITY INFO.:	US 1993-8/154,014		19931116
	US 1994-8/233,778		19940426
	US 1994-8/238,177		19940504

ABEN Oligomers having phosphonate internucleosidyl linkages mixed with non-phosphonate internucleosidyl linkages which hybridize to RNA target sequences and methods for their preparation are provided.

L35 ANSWER 1 OF 1 PCTFULL COPYRIGHT 2002 Univentio

ACCESSION NUMBER: 1998016540 PCTFULL ED 20020514

TITLE (ENGLISH): IMPROVED COUPLING ACTIVATORS FOR OLIGONUCLEOTIDE SYNTHESIS

TITLE (FRENCH): ACTIVATEURS DE COUPLAGE AMELIORES POUR LA SYNTHESE D'OLIGONUCLEOTIDES

INVENTOR(S): VARGEESE, Chandra; PIEKEN, Wolfgang; CARTER, Jeffrey, D.; YEGGE, John

PATENT ASSIGNEE(S): NEXSTAR PHARMACEUTICALS, INC.; VARGEESE, Chandra; PIEKEN, Wolfgang; CARTER, Jeffrey, D.; YEGGE, John

LANGUAGE OF PUBL.: English

DOCUMENT TYPE: Patent

PATENT INFORMATION:

NUMBER	KIND	DATE
WO 9816540	A1	19980423